Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of inserting a plurality of entries into an existing index keyed by multidimensional data, comprising:

selecting subsets of the index that overlap if the entries are inserted into the subsets of the index, wherein the subsets of the index are sibling nodes of one another and not leaf nodes;

inserting the entries within the subsets of the index; and

reorganizing the subsets of the index with the inserted entries, wherein said reorganizing includes reorganizing such that an amount of overlap of bounding boxes for objects in a strict subset of the index is reduced.

2. (canceled)

3. (original) A method according to claim 1, wherein:

the entries include spatial data; and

the index keyed by multidimensional data includes a spatial index.

4. (currently amended) A method according to claim 1, wherein the ~~subset include~~ sibling nodes are for ~~of~~ an R-Tree index.

5. (canceled)

6. (currently amended) A method of inserting a plurality of entries into ~~a~~ an existing spatial index, comprising:

selecting at least two and less than all children of a node in the spatial index, wherein the selected children are not leaf nodes and include objects distributed within;

distributing the entries within the selected children; and

reorganizing the objects distributed within the selected children.

7. (original) A method according to claim 6, wherein said reorganizing includes reorganizing such that an amount of overlap of bounding boxes for objects in the spatial index is reduced.

8. (original) A method according to claim 7, wherein one of the bounding boxes includes a minimum bounding rectangle (MBR).

9. (original) A method according to claim 6, wherein at least two of the selected children have respective bounding boxes that overlap with one another.

10. (original) A method according to claim 6, wherein said selecting includes selecting exactly two of the children.

11. (original) A method according to claim 10, wherein the exactly two of the children have respective bounding boxes that overlap with one another.

12. (previously presented) A method according to claim 6, wherein the objects distributed among the selected children include the entries.

13. (canceled)

14. (currently amended) A method of inserting a plurality of entries into ~~a~~ an existing multidimensional-keyed index organized as an R-Tree, comprising:

associating a node in the R-tree with a buddy node that is a sibling of the node, wherein the node and the buddy node are not leaf nodes;

clustering children of the node and the children of the buddy;

partitioning the clustered children and the entries into a plurality of groups, wherein at least one of the groups includes a child node of the cluster node, a buddy child node associated the child node, and one or more of the entries, said partition is performed so that overlap among bounding boxes associated with the groups is reduced; and

inserting said one or more of the entries among the child node and the buddy child node associated the child node.

15. (original) A method according to claim 14, wherein:

each node of the R-tree is associated with a respective bounding box; and

a first bounding box associated with the child node overlaps a second bounding box associated with the buddy child node.

16. (canceled)

17. (canceled)

18. (currently amended) A tangible computer-readable medium bearing instructions for inserting a plurality of entries into an existing index keyed by multidimensional data, said instructions arranged, upon execution by at least one processor, to perform the steps of:

selecting subsets of the index that overlap if the entries are inserted into the subsets of the index, wherein the subsets of the index are sibling nodes of one another and not leaf nodes;

inserting the entries within the subsets of the index; and

reorganizing the subsets of the index with the inserted entries, wherein said reorganizing includes reorganizing such that an amount of overlap of bounding boxes for objects in a strict subset of the index is reduced.

19. (currently amended) A tangible computer-readable medium bearing instructions for inserting a plurality of entries into ~~a~~ an existing spatial index, said instructions arranged, upon execution by at least one processor, to perform the steps of:

selecting at least two and less than all children of a node in the spatial index, wherein the selected children are not leaf nodes and include objects distributed within;

distributing the entries within the selected children; and

reorganizing the objects distributed within the selected children ~~reorganizing the subsets of the index with the inserted entries~~, wherein said reorganizing includes reorganizing such that an amount of overlap of bounding boxes for objects in a strict subset of the index is reduced.

20. (currently amended) A tangible computer-readable medium bearing instructions for inserting a plurality of entries into ~~a~~ existing multidimensional-keyed index organized as an R-Tree, said instructions arranged, upon execution by at least one processor, to perform the steps of:

associating a node in the R-tree with a buddy node that is a sibling of the node, wherein the node and the buddy node are not leaf nodes;;

clustering children of the node and the children of the buddy;

partitioning the clustered children and the entries into a plurality of groups, wherein at least one of the groups includes a child node of the cluster node, a buddy child node associated the child node, and one or more of the entries, said partition is performed so that overlap among bounding boxes associated with the groups is reduced; and

inserting said one or more of the entries among the child node and the buddy child node associated the child node.